

What is claimed is:

1. An air handling unit, comprising:

a frame structure which includes a plurality of side pieces;

a hinged panel which fits into a corresponding opening in said frame structure;

and

a living hinge on said hinged panel connectable to one of said side pieces.

2. An air handling unit according to claim 1, wherein said hinged panel includes:

first and second covers; and

a panel perimeter, wherein said first cover and said second cover are held in spaced apart relationship with plastic foam entirely filling a cavity thus formed between said first and second covers and said panel perimeter.

3. An air handling unit according to claim 2, wherein said living hinge includes:

a mounting flange;

a hinged portion; and

an edge extrusion, wherein said hinged portion is disposed between said mounting flange and said edge extrusion, and said edge extrusion is connectable to said panel perimeter.

4. An air handling unit according to claim 3, wherein said living hinge is one-piece with said panel perimeter.

5. An air handling unit according to claim 4, further comprising a latching mechanism disposed in one of said hinged panel and one of said plurality of side pieces, wherein said latching mechanism locks said hinged panel into said corresponding opening in said frame structure.

6. An air handling unit according to claim 5, further comprising a compressible seal affixed to at least one of said side pieces, such that when said hinged panel is locked into said corresponding opening in said frame structure, said hinged panel sealingly engages said at least one of said side pieces.

1 7. An air handling unit according to claim 1, wherein said living hinge includes:
2 a mounting flange;
3 a hinged portion; and
4 an edge extrusion, wherein said hinged portion is disposed between said
5 mounting flange and said edge extrusion, and said edge extrusion is connectable to a
6 panel perimeter of said hinged panel.

1 8. An air handling unit according to claim 7, wherein said living hinge is one-piece
2 with said panel perimeter.

1 9. An air handling unit according to claim 8, further comprising a latching
2 mechanism disposed in one of said hinged panel and one of said plurality of side
3 pieces, wherein said latching mechanism locks said hinged panel into said
4 corresponding opening in said frame structure.

1 10. An air handling unit according to claim 9, further comprising a compressible seal
2 affixed to at least one of said side pieces, such that when said hinged panel is locked
3 into said corresponding opening in said frame structure, said hinged panel sealingly
4 engages said at least one of said side pieces.

1 11. An air handling unit according to claim 1, further comprising a latching
2 mechanism disposed in one of said hinged panel and one of said plurality of side
3 pieces, wherein said latching mechanism locks said hinged panel into said
4 corresponding opening in said frame structure.

1 12. An air handling unit according to claim 11, further comprising a compressible
2 seal affixed to at least one of said side pieces, such that when said hinged panel is
3 locked into said corresponding opening in said frame structure, said hinged panel
4 sealingly engages said at least one of said side pieces.

1 13. A hinged panel for an air handling unit, comprising:
2 first and second covers;
3 a panel perimeter, wherein said first cover and said second cover are held in
4 spaced apart relationship with plastic foam entirely filling a cavity thus formed
5 between said first and second covers and said panel perimeter; and
6 a living hinge connected to said panel perimeter.

1 14. A hinged panel according to claim 13, wherein said living hinge includes:
2 a mounting flange;
3 a hinged portion; and
4 an edge extrusion, wherein said hinged portion is disposed between said
5 mounting flange and said edge extrusion, and said edge extrusion is connectable to
6 said panel perimeter of said hinged panel.

1 15. A hinged panel according to claim 14, wherein said living hinge is one-piece with
2 said panel perimeter.

1 16. A hinged panel according to claim 14, further comprising a latching mechanism
2 disposed in said hinged panel.